

November 26, 1996, issued October 6, 1998, as U.S. Patent No. 5,817,497. U.S. application serial numbers 09/309,320, 09/096,571, and 08/756,771 are hereby expressly incorporated by reference.

IN THE CLAIMS

Please cancel Claim 9 without prejudice or disclaimer.

Please amend Claims 2 and 8 as follows.

For the Examiner's convenience, all pending claims are listed below. Attached hereto is a marked-up version of the changes made to the Specification and Claims by the current amendment. The attached page is captioned "VERSION WITH MARKINGS TO SHOW CHANGES MADE."

1. A purified polypeptide comprising an amino acid sequence selected from the group consisting of:
 - a) an amino acid sequence of SEQ ID NO:1,
 - b) a naturally-occurring amino acid sequence having at least 90% sequence identity to the sequence of SEQ ID NO:1,
 - c) a biologically-active fragment of the amino acid sequence of SEQ ID NO:1, and
 - d) an immunogenic fragment of the amino acid sequence of SEQ ID NO:1.
2. (Once Amended) An isolated polynucleotide encoding a polypeptide comprising an amino acid sequence selected from the group consisting of:
 - a) an amino acid sequence of SEQ ID NO:1, and
 - b) a naturally-occurring amino acid sequence having at least 90% sequence identity to the sequence of SEQ ID NO:1 over the entire length of SEQ ID NO:1.
3. A recombinant polynucleotide comprising a promoter sequence operably linked to a

4. A cell transformed with a recombinant polynucleotide of claim 3.
5. A transgenic organism comprising a recombinant polynucleotide of claim 3.
6. A method for producing a polypeptide of claim 1, the method comprising:
 - a) culturing a cell under conditions suitable for expression of the polypeptide, wherein said cell is transformed with a recombinant polynucleotide, and said recombinant polynucleotide comprises a promoter sequence operably linked to a polynucleotide encoding the polypeptide of claim 1, and
 - b) recovering the polypeptide so expressed.
7. An isolated antibody which specifically binds to a polypeptide of claim 1.
8. (Once Amended) An isolated polynucleotide comprising a sequence selected from the group consisting of:
 - a) a polynucleotide sequence of SEQ ID NO:2,
 - b) a naturally-occurring polynucleotide sequence having at least 90% sequence identity to the sequence of SEQ ID NO:2, over the entire length of SEQ ID NO:2,
 - c) a polynucleotide sequence completely complementary to a),
 - d) a polynucleotide sequence completely complementary to b) and
 - e) a ribonucleotide equivalent of a)-d).
10. A method for detecting a target polynucleotide in a sample, said target polynucleotide having a sequence of a polynucleotide of claim 8, the method comprising:
 - a) hybridizing the sample with a probe comprising at least 20 contiguous nucleotides comprising a sequence complementary to said target polynucleotide in the sample, and

conditions whereby a hybridization complex is formed between said probe and said target polynucleotide or fragments thereof, and
b) detecting the presence or absence of said hybridization complex, and, optionally, if present, the amount thereof.

11. A method of claim 10, wherein the probe comprises at least 60 contiguous nucleotides.

12. A method for detecting a target polynucleotide in a sample, said target polynucleotide

having a sequence of a polynucleotide of claim 8, the method comprising:

- a) amplifying said target polynucleotide or fragment thereof using polymerase chain reaction amplification, and
- b) detecting the presence or absence of said amplified target polynucleotide or fragment thereof, and, optionally, if present, the amount thereof.

13. A composition comprising an effective amount of a polypeptide of claim 1 and an acceptable excipient.

14. A method for screening a compound for effectiveness as an agonist of a polypeptide of claim 1, the method comprising:

- a) exposing a sample comprising a polypeptide of claim 1 to a compound, and
- b) detecting agonist activity in the sample.

15. A method for screening a compound for effectiveness as an antagonist of a polypeptide of claim 1, the method comprising:

- a) exposing a sample comprising a polypeptide of claim 1 to a compound, and
- b) detecting antagonist activity in the sample.

16. A method for screening a compound for effectiveness in altering expression of a target polynucleotide, wherein said target polynucleotide comprises a polynucleotide sequence of SEQ ID NO:2, the method comprising:

- a) exposing a sample comprising the target polynucleotide to a compound, under conditions suitable for the expression of the target polynucleotide;
- b) detecting altered expression of the target polynucleotide; and
- c) comparing the expression of the target polynucleotide in the presence of varying amounts of the compound and in the absence of the compound.

17. A method for assessing toxicity of a test compound, said method comprising:

- a) treating a biological sample containing nucleic acids with the test compound;
- b) hybridizing the nucleic acids of the treated biological sample with a probe comprising at least 20 contiguous nucleotides of a polynucleotide of claim 8 under conditions whereby a specific hybridization complex is formed between said probe and a target polynucleotide in the biological sample, said target polynucleotide comprising a polynucleotide sequence of a polynucleotide of claim 8 or fragment thereof;
- c) quantifying the amount of hybridization complex; and
- d) comparing the amount of hybridization complex in the treated biological sample with the amount of hybridization complex in an untreated biological sample, wherein a difference in the amount of hybridization complex in the treated biological sample is indicative of toxicity of the test compound.

18. A method for treating a disease or condition associated with decreased expression of functional HGST, comprising administering to a patient in need of such treatment the composition of claim 13,

wherein the compound identified by a method of claim 14 and

20. A method for treating a disease or condition associated with decreased expression of functional HGST, comprising administering to a patient in need of such treatment a composition of claim 19.